



(12) **EUROPEAN PATENT APPLICATION**

(88) Date of publication A3:  
**03.08.2011 Bulletin 2011/31**

(51) Int Cl.:  
**F03D 1/06 (2006.01)**

(43) Date of publication A2:  
**03.09.2008 Bulletin 2008/36**

(21) Application number: **08003243.6**

(22) Date of filing: **22.02.2008**

(84) Designated Contracting States:  
**AT BE BG CH CY CZ DE DK EE ES FI FR GB GR HR HU IE IS IT LI LT LU LV MC MT NL NO PL PT RO SE SI SK TR**  
Designated Extension States:  
**AL BA MK RS**

(30) Priority: **28.02.2007 ES 200700527**

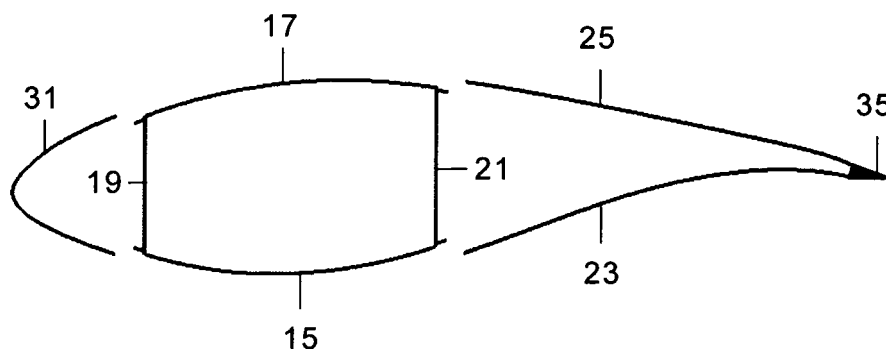
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(54) **A wind turbine multi-panel blade**

(57) A wind turbine blade (1, 3, 5) comprising at least one central spar longitudinal section (7, 7', 7'') composed of two cap prefabricated panels (15, 17) and two web prefabricated panels (19, 21) placed side by side in a box shape and at least two shell longitudinal sections (5, 5', 5'', 5''', 5'''; 9, 9', 9'', 9''') forming, respectively, the leading

edge and the trailing edge of the corresponding blade section that are placed adjacently to a central spar section (7, 7', 7'') and are composed of a single prefabricated panel (31, 33) or of two prefabricated panels (11, 23; 13, 25), the aerodynamic profile of the blade being defined by said cap panels (15, 17) and said single shell panels (31; 33) or said two shell panels (11, 23; 13, 25).



**FIG. 2**



## EUROPEAN SEARCH REPORT

Application Number  
EP 08 00 3243

DOCUMENTS CONSIDERED TO BE RELEVANT			
Category	Citation of document with indication, where appropriate, of relevant passages	Relevant to claim	CLASSIFICATION OF THE APPLICATION (IPC)
X	WO 01/46582 A2 (AERODYN ENG GMBH [DE]; SIEGFRIEDSEN SOENKE [DE]) 28 June 2001 (2001-06-28) * page 4, line 15 - line 25 * * page 5, line 10 - line 19 * * page 5, line 21 - line 23 * * figures 1-3 *	1-3,5-9, 12-16	INV. F03D1/06
X	US 2005/186081 A1 (MOHAMED MANSOUR H [US]) 25 August 2005 (2005-08-25) * figures 4,5 * * paragraph [0018] *	1-4,6,7, 10,15,16	
E	WO 2008/092451 A2 (UNIV DANMARKS TEKNISKE [DK]; JENSEN FIND MOELHOLT [DK]) 7 August 2008 (2008-08-07) * page 4, line 15 - page 5, line 1 * * page 5, line 14 - line 25 * * page 5, line 29 - line 31 * * page 5, line 37 - line 38 * * page 6, line 8 - line 18 * * page 6, line 36 - line 37 * * page 7, line 30 - line 32 * * page 7, line 38 - page 8, line 3 * * page 10, line 25 - line 32 * * page 11, line 29 - line 31 * * page 12, line 26 - line 36 * * figures 2,5,6,8-16 *	1-3,5,6, 8-16	
			TECHNICAL FIELDS SEARCHED (IPC)
			F03D
The present search report has been drawn up for all claims			
Place of search The Hague		Date of completion of the search 28 June 2011	Examiner Westermayer, Philipp
<p>CATEGORY OF CITED DOCUMENTS</p> <p>X : particularly relevant if taken alone Y : particularly relevant if combined with another document of the same category A : technological background O : non-written disclosure P : intermediate document</p> <p>T : theory or principle underlying the invention E : earlier patent document, but published on, or after the filing date D : document cited in the application L : document cited for other reasons &amp; : member of the same patent family, corresponding document</p>			

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EPO FORM 1503 03.82 (P04C01)

**ANNEX TO THE EUROPEAN SEARCH REPORT  
ON EUROPEAN PATENT APPLICATION NO.**

EP 08 00 3243

This annex lists the patent family members relating to the patent documents cited in the above-mentioned European search report.  
The members are as contained in the European Patent Office EDP file on  
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28-06-2011

Patent document cited in search report		Publication date		Patent family member(s)		Publication date
WO 0146582	A2	28-06-2001	AU	3151201 A		03-07-2001
			DE	19962454 A1		05-07-2001
-----						
US 2005186081	A1	25-08-2005	US	2007189902 A1		16-08-2007
			WO	2005081995 A2		09-09-2005
-----						
WO 2008092451	A2	07-08-2008	CN	101595300 A		02-12-2009
			EP	2109713 A2		21-10-2009
			US	2010068065 A1		18-03-2010
-----						